

Title (en)  
METHOD AND DEVICE FOR OPTICAL MEASUREMENT

Title (de)  
VERFAHREN UND VORRICHTUNG ZUR OPTISCHEN MESSUNG

Title (fr)  
PROCEDE ET DISPOSITIF DE MESURE OPTIQUE

Publication  
**EP 2628041 B1 20180530 (FR)**

Application  
**EP 11782178 A 20111014**

Priority  
• FR 1004067 A 20101015  
• FR 2011000555 W 20111014

Abstract (en)  
[origin: WO2012049381A2] The invention proposes an optical method of measurement and an optical apparatus for determining the spatial position of at least one luminous nanoemitter of a sample, the method comprising: the projection of a sequence of at least two compact luminous distributions of different topological families onto the sample, the detection of the light reemitted by said at least one luminous nanoemitter of the sample; the generation of at least one optical image for each luminous distribution, on the basis of the light detected; and the algorithmic analysis of the optical images to obtain information regarding the location of said at least one luminous nanoemitter. The invention further relates to an optical method of measurement and an optical apparatus for determining the spatial position of a plurality of point light sources, the method comprising the detection of the light emitted by the plurality of point light sources; and the separation of the light emitted on a plurality of detectors for simultaneous or sequential detections; the proportion of the light emitted by a point light source, channelled to a specific detector, being dependent on the spatial position of said point light source; and the generation of the optical images on the basis of the light detected; and the algorithmic analysis of the optical images to obtain an item of information regarding the location of the plurality of point light sources.

IPC 8 full level  
**G02B 21/00** (2006.01)

CPC (source: EP US)  
**G01B 11/14** (2013.01 - US); **G01N 21/64** (2013.01 - US); **G01N 21/6428** (2013.01 - US); **G01N 21/6458** (2013.01 - US);  
**G02B 21/0056** (2013.01 - EP US); **G02B 21/0072** (2013.01 - EP US); **G02B 21/0076** (2013.01 - EP US); **G02B 21/16** (2013.01 - US);  
**G01B 11/25** (2013.01 - US); **G01N 2201/06113** (2013.01 - US); **G01N 2201/12** (2013.01 - US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2012049381 A2 20120419; WO 2012049381 A3 20120712**; EP 2628041 A2 20130821; EP 2628041 B1 20180530;  
EP 3418788 A1 20181226; EP 3418788 B1 20220413; EP 4227723 A1 20230816; FR 2966258 A1 20120420; FR 2966258 B1 20130503;  
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US 2023228561 A1 20230720; US 2024053138 A1 20240215; US 9250185 B2 20160202; US 9846030 B2 20171219

DOCDB simple family (application)  
**FR 2011000555 W 20111014**; EP 11782178 A 20111014; EP 18000486 A 20111014; EP 22075008 A 20111014; FR 1004067 A 20101015;  
JP 2013533252 A 20111014; US 201113822355 A 20111014; US 201514998051 A 20151224; US 201715812016 A 20171114;  
US 201916557030 A 20190830; US 202017087238 A 20201102; US 202217589265 A 20220131; US 202318179062 A 20230306;  
US 202318486815 A 20231013